ANCIENT EUGENICS

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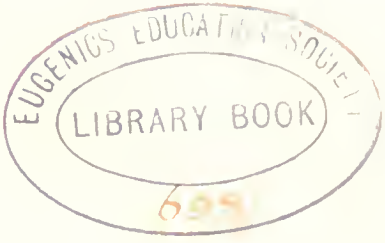
Dr Schiller



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ANCIENT EUGENICS

THE ARNOLD PRIZE ESSAY FOR 1913

BY

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ὅταν δὲ κρηπὶς μὴ καταβληθῆ γένους
ὀρθῶς, ἀνάγκη δυστυχεῖν τοὺς ἐκγόνους.

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ANCIENT EUGENICS

THE preface to a history of Eugenics may be compiled from barbarism, for the first Eugenist was not the Spartan legislator, but the primitive savage who killed his sickly child. The cosmic process was checked and superseded by another as ruthless as Nature's own method of elimination. The lower the community, the more rapidly it reproduces itself. There is an extravagant production of raw material, and the way of Nature, " red in tooth and claw," is the ruthless rejection of all that is superfluous. When there is no differential birth-rate, the result of foresight and self-control, and the attainment of a higher level of civilization, Nature adjusts the balance by means of a differential death-rate. In the days when human or animal foe threatened on every side, when " force and fraud were the two cardinal virtues," and the life of man was " solitary, poor, nasty, brutish, and short," natural selection must have been ruthless and severe. Some conception of the wasteful processes of Nature dawned upon the savage mind. While they lived their short lives, the weakly, the deformed, and the superfluous were a burden to the tribe. Human law, superseding natural law, strove to eliminate them at

birth. This was the atavistic basis on which subsequent Eugenics was built.

In Greece, the theory underwent a logical development. Even in a later age of dawning civilization, war confronted men with this same problem of the ruthless extermination of the unfit. It was recognized that the occurrence of the non-viable child was inevitable, but remedial legislation, reaching a step further back, essayed by anticipation to reduce this waste of life to a minimum. It was realized that to increase the productivity of the best stock is a more important measure than to repress the productivity of the worst. Out of the Negative aspect of Eugenics develops the Positive.

With the advance of civilization, conditions become increasingly stable: war is still imminent, but, instead of being an essential element of existence, it is regarded as a necessary evil. Nature, forging additional weapons, hastens the elimination of the unfit by disease. Some form of Eugenics is still necessary, but in the altered conditions a new ideal is born. The conception of a race of warriors merges into the ideal of a state of healthy citizens. All these formulations of Eugenics are aristocratic and parochial; they are to benefit the people of a single state, and only a section within that state. Any wider conception of racial regeneration was impossible to a people who dichotomized the state into free citizens and living instruments, the world into Greeks and barbarians.

The breakdown of the city states brought a cosmo-

politanism which, instead of widening the ideal of humanity, centred itself on the interests of the individual. Modern Eugenics is based on Evolution—not a passive form, but one that concedes some latitude to the guiding action of the human will.[1] Without some such postulate, egotism becomes a rational creed amid the social welter and world-weariness of a deliquescent civilization. Man is cut off sharply and definitely from all that went before and all that follows. Only the isolated ego remains, " a sort of complementary Nirvana," and the philosophy of " Ichsucht," of self-centred individualism, ends in Hedonism or ascetic alienation from an inexplicable universe. No scheme of social reform can bear fruit in such an atmosphere of philosophic negation. Like Plato's philosopher, man shelters from the tempest behind the wall.

Three conceptions of the cosmic process are possible. We may maintain that there is no such thing as progress, that life is a mere pointless reiteration of age after age till there comes the predestined cataclysm; we may believe in a primeval age of innocence and happiness, a golden age, or a state of nature *diablement idéal;* finally, we may trust in the gradual evolution of mankind towards a terrestrial Paradise, hoping that " on our heels a fresh perfection treads, a power more strong in beauty, born of us, and fated to excel us as we pass in glory that old darkness."

This conception of man as heir of all the ages,

[1] Galton, " Essays in Eugenics," p. 68.

though vaguely anticipated by Anaximander, was impossible to an age which knew nothing of biology. No system of Eugenics is likely to flourish side by side with the belief in an unprogressive or degenerate humanity, steadily and inevitably declining from primordial perfection. So long as the city state survived, patriotism prevailed over pessimism, and ideals of regeneration were more than the idle dreams of the philosopher. But the growing prominence assigned to the theoretic life shows the gradual growth of despair. After Aristotle, Eugenics takes its place among the forgotten ideals of the past.

But a thought or a theory which has once quickened into life becomes immortal. It may change its form, but it never perishes. Throughout time it is ceaselessly renewing its existence. While infanticide is everywhere disappearing, there remain still the principles simultaneously developed. Three centuries ago Eugenics was the Utopian dream of an imprisoned monk. A century later Steele, more in jest than in earnest, suggested that one might wear any passion out of a family by culture, as skilful gardeners blot a colour out of a tulip that hurts its beauty.[1] But neither science nor public opinion was ready to respond. It was not till late in the nineteenth century that the crude human breeding of the Spartans, in altered form and in new conditions, became the scientific stirpiculture of Galton.

[1] *Tatler*, vol. ii., No. 175, 1709; quoted by Havelock Ellis, "Social Hygiene."

Ancient Eugenics

To read the small minuscule of Ancient Eugenics, it is expedient first to scan the uncials of modern theory. Beneath the new form engendered by altered conditions, with the unessential and accidental passing away into other combinations, there remains an essential identity of form. History can only be an attempted interpretation of earlier ages by the modes of thought current in our own. The foreground of human life we can see with exactness, but the past is foreshortened by the atmosphere of time.

Under the modern conditions of civilization, elimination by international or individual violence is steadily decreasing. Nature has found an equally effective weapon in the process of urbanization. Disease spreads rapidly amid conditions inimical in the highest degree to healthy living. But while infanticide forms the basis on which the ancient system was built, the abolition of that practice has been the starting-point for the New Eugenics. It has confronted us with problems unknown to a pre-Christian age.

The Ancients attempted to combat the wasteful processes of Nature by eliminating the non-viable at birth; our efforts, on the contrary, have been directed to the prolongation of their lives. Instead of sacrificing the unfit in the interests of the fit, we have employed every resource of modern science "to keep alight the feeble flame of life in the base-born child of a degenerate parent."[1]

[1] Tredgold, "Eugenics and Future Progress of Man."

The weapons forged by Nature have been taken from her hands. Side by side with the rapid multiplication of the unfit there has been a marked decline in the birth-rate of the useful classes of the community. The relatively strongest survive, but their strength has suffered from the influences which brought extinction to the weaker. This is one of the problems caused by a humaner sentiment.

In the second place, the abolition of infanticide has confronted us with the necessity of knowledge. The methods of the breeder are ruthless and precise. He slaughters or he spares, and divergent variations are a matter of no moment. So the Spartans and Plato, with this analogy before them, were saved from the necessity of any deeper knowledge by the preventive check of infanticide. If Nature erred in her intentions, this art was at hand to rectify her mistakes. Infanticide saved the Greeks from the problems of heredity.

For all practical purposes our knowledge is as infinitesimal as in the days of Plato. The methods of biometry and statistics, the actuarial side of heredity, deal merely with the characteristics of groups. Mendelism, dealing with the individual, finds verification in man only in the case of feeble-mindedness and in the inheritance of certain deformities. Any constructive scheme of Eugenics is impossible under the limitations of our knowledge.

Apart from the question of heredity, there is the problem of selection. Though physique is easily estimated, and correlated, perhaps, as Galton held,

with other good qualities, the modern Eugenist has before him no simple homogeneous ideal. He has to recognize the psychical as well as the physical aspect of the intricate mosaic of human personality. The self-sacrificers and the self-tormentors claim their place no less than a Marcus Aurelius or an Adam Bede.[1] Even though we hold it possible to compile a list of qualities for selection universally acceptable, we cannot, under the present limitations of our knowledge, prove personal value to be synonymous with reproductive value. No scheme of economic Eugenics, inferring the aptitudes of individuals from social position or income, can solve the hopeless perplexities that wait upon constructive methods. Passing from the municipality to the world, Eugenics is confronted by the conflicting ideals not only of alternative characters, but also of incompatible civilizations. Since differentiation is an indispensable factor in human progress, there arises the further problem of a Eugenic ethnology.

This, then, is the shape modern theory has assumed in answer to the demands of modern civilization. Lost in Egotism, Eugenics found opposition no less formidable in a spirit of imprudent altruism. Only the scientific altruism of to-day has rendered it once more practicable.

From its origin in the unreflective intuition of the atavistic past we will trace the growth of the theory till it passed into the pages of Aristotle, and became

[1] Galton, "Essays in Eugenics," p. 36.

lost to view amid the throes of a pessimistic and decadent age.

Infanticide and Exposure, terms which in early ages were virtually synonymous, appear on first consideration to have been practised among uncivilized tribes for a bewildering multiplicity of reasons.[1] There is the female infanticide of China and the Isles of the Southern Pacific, the male infanticide of the Abipones of Paraguay, and the indiscriminate massacre of the Gagas, who, killing every child alike, steal from a neighbouring tribe. There are the Indians who offer up children to Moloch or drown them in the Ganges; the Carthaginians sacrifice them to Kronos, the Mexicans to the rain god. There is the murder of twins and albinos in Arebo, and the cannibalism of the Aborigines. In Mingrelia, "when they have not the wherewithal to maintain them, they hold it a piece of charity to murder infants new born." There are the Biluchi, who kill all their natural children, and there is the modern factor of shame.

Co-existing with all these various practices there is the definitely Eugenic motive. Among the Aborigines, all deformed children are killed as soon as born. The savages of Guiana kill any child that is "deformed, feeble, or bothersome." The Fans kill all sickly children. In Central America "it is suspected that infant murder is responsible for the rarity of the deformed." In Tonquin we hear of a

[1] McLennan, "Studies in Ancient History," chap. vii., *passim*.

law which forbids the exposing or strangling of children, be they ever so deformed. In Japan, deformed children were killed or reared according to the father's pleasure. Among the Prussians the aged and infirm, the sick and deformed, were unhesitatingly put to death.

The question arises, therefore, whether the Eugenic motive first led to the institution of infanticide, or whether it was merely a by-product, a later growth, springing out of a practice which owed its inception to totally different causes. Setting aside infanticide when prompted by mere brutality or cannibalistic cravings, and excluding the modern factor of shame, which was unknown among primitive peoples, the motives may be classified as irrational or rational.

Irrational motives are the religious or superstitious, rational the Eugenic. Between these two there is a wide line of demarcation.

The origin of religious infanticide is obscure. It may be merely evidence of fiendish passion. There may be in it something of a sacramental meal, or possibly the primal idea in its many variations is the gain of some benefit by the sacrifice of something of value. In any case, whatever the basic intention, the religious motive in infanticide has no relation to the Eugenic. Such melancholy theology implies some degree of social organization, and was, therefore, a later and independent conception.

Only some powerful and long-continued pressure could have brought about the reversal of sentiments

which must have been innate in primitive man as much as in other animals. The impelling sources were two—want and war, or both in combination—not want in the form of famine, which, working its own cure, not infrequently leaves an increased prosperity behind it, nor war as brief and desolating in its effects as warfare of to-day, but rather that long-enduring warfare pressing on generation after generation, which is the State of Hostility. This was the normal state of early man, a condition of affairs inseparable from independent life in small communities. Jacob and Esau go their separate ways, form different habits and different languages. Estrangement follows inevitably.

Even before man became his own worst enemy, brute creation must have furnished formidable foes to the naked and defenceless savage. There must have been pending want at this early stage of life. Under pressure of want, the group must adjust their numbers to the available food; under pressure of war, the same problem rises in still more urgent form. From these circumstances arises the practice of infanticide. It is circumstance, says Plato, and not man, which makes the laws.[1]

The nomadic group, passing from district to district in search of food, would find the children a burden. The first infanticides, casual rather than premeditated, were in the nature of a desertion. This preparing the way for an extension of the practice would lead to its adoption in the attempt

[1] "Laws," 709.

to adjust numbers to the available food-supply. In the same way non-combatants would be regarded in the nature of impedimenta, since they consumed food without benefiting the group in return.

The first system of infanticide is, therefore, a policy of despair. The first victims would probably be the deformed, the maimed, and the weaklings, and female infanticide would follow. The problem of the maintenance of the race arising would lead to male infanticide whenever there was a deficiency of women; hence the custom, so far from being merely callous and brutal, and an argument for man's inferiority to the beast, is a proof of the highest intelligence.

These barbaric Eugenics, therefore, eliminating at birth those foredoomed to perish in the struggle for existence, were concerned with questions both of quantity and quality. Limitation of numbers, though it does not itself constitute "aggeneration" of the race, improves to a considerable degree the individuals of which the race is constituted. When the undesired children are out of the way, more attention can be paid to the desired. The savage bred recklessly, compensating his recklessness by infanticide, but a natural law of civilization has superseded the artificial law of primitive man. Control of reproduction, and resulting from it a falling birth-rate and a diminished death-rate, is a tendency which, first showing itself in Imperial Rome, is conspicuous to-day in every civilized community.

Ancient Eugenics

Infanticide, sanctioned by long usage, passed into the law of civilized nations. It appears in the legislation of Solon,[1] though the grounds for its adoption are uncertain, while at Rome it was ordained by the Twelve Tables for a definitely Eugenic motive. A child conspicuously deformed was to be immediately destroyed.[2] But this limitation was frustrated by the control conceded to the father, which, restricted in Greece by all legislators alike, was as arbitrary in Rome as in Gaul.[3]

So at Rome the Eugenic motive fades into the background, and abuses become so frequent that they have to be checked by further legislation. Romulus is said to have forbidden the murder of sons and first-born daughters,[4] and the "Lex Gentilicia" of the Fabii, who were in danger of extinction, decreed that every child born must be reared.

Under the Empire we find Seneca asserting once more the Eugenic justification of infanticide. "We drown the weakling and the monstrosity. It is not passion, but reason, to separate the useless from the fit."[5] Two distinct tendencies appear, control of

[1] According to Sext. Empiricus (Pyrrhon., "Hypot.," iii. 24), Solon conceded to the father the power of killing his children. Taken in conjunction with the limitation of the *patria potestas*, this appears improbable. According to Plutarch (Solon, xxii.), he sanctioned the exposure of natural children.

[2] "Insignis ad deformitatem" (Cic., "De Leg.," iii. 8).

[3] Cæs., "De Bell. Gall.," vi. 19.

[4] Dionysius, ii. 28.

[5] "De Ira," i. 18.

reproduction diminishing infanticide among the upper classes, exposure taking its place among the lower.

The gloomy satirists of the Early Empire, instead of inveighing against the practice of exposure, abused the foresight which superseded it, and, so far from recognizing the tendency as one demanded in the altruistic interests of the race, saw in it merely egotistic subservience to the "*captatores*." The πολυπαιδίας ἆθλα of Gaius Julius or the *jus trium liberorum* of Augustus were futile attempts to combat an essential law of civilization.

The lower classes, on the contrary, propagating recklessly amid extreme pauperism—for rapid multiplication is the concomitant of bad environment—resorted to exposure, which is the antithesis of Eugenic infanticide. Quintilian, indeed, declared that the exposed rarely survived,[1] but the possibilities of gain must have led to frequent preservation—"vel ad lupanar vel ad servitutem."[2] Occasionally the luckless child falls into the hands of unscrupulous mendicants, who maim it and exhibit it for gain.[3] The existence of a numerous class of Θρέπτοι was a problem with which Pliny had to deal.

So the Christian Councils and the Christian Emperors set themselves vehemently to oppose the practice, but, using palliation instead of prevention,

[1] "Dec.," ccevi. 6.
[2] Lact., "De Vero Cultu.," lib. vi.
[3] Seneca, "Controv.," v. 33.

relieved the world of one problem and left another in its place. Despite the legislation of Constantine, Valentinian, and Justinian, exposure still continued. Marble vessels at the door of the churches produced the evil turning slide, and gradually there came into being hospitals, asylums, refuges, crèches, receiving and tending the blind, the deaf, the dumb, the crippled, and defective, and with much good has also come much evil. Out of the failure of the Christian Fathers to find the right solution to a difficult problem has arisen the imperative need for the scientific altruism of Eugenics.

Beyond infanticide, which, despite its many perversions, was in part Eugenic, the Romans made no conscious effort to build a scheme of racial regeneration. Whatever the appeal of "patient Lacedæmon" to the sentimental vulgarity of the Romans, they learnt no lesson from their admiration, though the biographer of Lycurgus lectured to Domitian. In the crude scheme of the Germans Tacitus finds no Eugenic moral.

Restrictive marriage, perhaps, would have been a perilous lesson to teach to the Cæsars, in whom, from Julius the epileptic to Nero the madman, psychologists find clear proof of hereditary insanity. Pliny's boast that for 600 years Rome had known no doctors shows that there was little interest among the Romans in schemes of hygiene or social reform. The Greeks themselves had long ago forgotten the teaching of Plato and Aristotle. Eugenics was lost in Stoicism, and Stoicism was the creed of the Empire.

"This age is worse than the previous age, and our father will beget worse offspring still." And Aratus voices again the lament of Horace: "What an age the golden sires have left behind them, and your children will be worse even than you!"[1] The Golden Age of Rome lay for ever in the past.

In Greece, the theory underwent a logical development. State-controlled infanticide passes into a definite scheme of Negative Eugenics. The Negative aspect, giving rise to the Positive, fades into the background, and is retained merely as a check on the imperfections of a constructive scheme.

The systematized infanticide of Sparta, so far from being a recrudescence to atavism, is an advance towards civilization. A custom which had been so deeply implanted in the race by ages of barbarism, and had resisted for centuries the incessant warfare of the Christian Fathers at Rome, would not easily have been uprooted in Greece. To supersede the reckless and capricious brutality of individuals by state infanticide on a definite basis was an essential gain to humanity, however much the Spartans may have been actuated by ulterior motives.

The destiny of the new-born child is no longer decreed in the privacy of the home; it is brought instead into the Council Hall before the Elders of the tribe. If well set up and strong, it is to be reared; otherwise, doomed as useless, it is cast into the fateful chasm on the slopes of Mount Taygetus, for they hold that "it was better for the child and

[1] "Phenom.," 123-124.

the city that one not born from the beginning to comeliness and strength should not live."[1]

Selective infanticide can only rest on a physical basis; there is no speculation in latent capacity. There was no list of unhealthy geniuses in the annals of Sparta, no St. Paul, no Mohammed, no Schumann, no De Quincey. Even if selection had been less rigorous, and genius had been conceded the right to live, environment would have denied it the right to develop. Sparta, content that Athens should be the Kulturstaat of Greece, cared only that the military hegemony should be her unchallenged right.

Once infanticide had become a system, its recognition as a *pis aller* would suggest regulation of marriage. By retention of infanticide as ancillary to the Constructive Scheme, the anomalies of heredity admitted of a simple and ruthless solution.

Positive Eugenics, not only in the past, but also to-day, is based on the analogy of animal breeding. The Spartans were the first to realize the inconsistency of improving the breed of their dogs and horses, and leaving to human kind the reckless propagation of the mentally defective, the diseased, and the unfit.[2]

The use of analogy presents many pitfalls to be surmounted, and it is easy to see the absurdity of any conception of Eugenics as a sort of higher cattle-breeding. Full experimental control is not possible with man as it is with animals and plants. The analogy, literally accepted, would require a

[1] Plut., "Lyc.," 16. [2] *Ibid.*, xv. 25.

race of supermen, or some outside scientific authority manipulating a lower stock for its own advantage. Human Eugenics, to be effective, can never be a cold-blooded selection of partners from without; it must be voluntary, and from within, resulting from a new ethical sense of the individual's relation to the social group.

In the second place, the whole world of spiritual motives lies outside the province of the breeder. He is faced with no problem of differentiation. With a clear and homogeneous ideal before him, he sets himself to its attainment, killing and preserving with simple and ruthless precision. The Spartan system was partly a literal acceptance of the analogy, partly a spiritualization. There was no cold-blooded selection of partners, and no interference with sexual attraction. The Romantic ideal was the discovery of the late Greek world under the Roman Empire, but any sentiment that existed at Sparta was as unhampered as romance to-day in the theory of modern Eugenists.

Marriage was by simulated abduction.[1] The story quoted by Athenæus of blind selection in a darkened room may be rejected as a palpable absurdity.[2] The only restriction was in the matter of age[3]—a regulation which was the commonplace of Greek thought from the days of Hesiod[4] to the time of

[1] Plut., "Lyc.," xv. 15.
[2] Ath., "Deipn.," xiii. 553*c*.
[3] Plut., "Lyc.," 15; Xen., "Reip. Lac.," i. 7.
[4] "Op. et Dies," 695 *et seq*.

Aristotle. Modern knowledge shows the influence of parental age not only upon the physique, but also upon the character of the offspring.[1]

The Spartans, therefore, were, within these limits, unfettered in their choice of brides, but were punished for abuse of the liberty conceded them. There was a penalty appointed for celibacy, a penalty for late marriage, but the third and the greatest penalty was for a bad marriage.[2]

A further concession, the privilege only of the worthy, is seen in the compliances permitted on the part of the wife, that she might produce children for the state. So far from this practice being a recrudescence to the habits of the early savage,[3] or an instance of an Aryan custom akin to the Hebrew Levirate,[4] it seems obvious that it was a Eugenic measure suggested by the analogy of the breeder.[5] Thus, it appears that within Eugenic limits considerable play was conceded to human personality.

It is true that the bearing of children was regarded as the essential function of women, and this view, though biologically justified, seems to ignore that other aspect of marriage—mutual assistance and companionship.[6] But even in free Athens the ideal

[1] Mario, "Influence of Age of Parents on Psychophysical Characters of Offspring." Paper read before Eugenics Congress, 1912.

[2] Stobæus, lxvii. 16. *Vide* Plut., "Lysand. fin.," p. 451*ab*.

[3] Barker, "Political Thought of Plato and Aristotle," p. 153.

[4] Mahaffy, "Greek Literature," vol. ii., part 2, p. 68.

[5] Plut., "Lyc.," xv. 30. [6] *Ibid.*, "Lyc. et Num.," 4.

of a Nausicaa, Penelope, or Andromache, had been superseded long since by a conception of woman which regarded her as little more than a procreative drudge. Love marriages and genuine affection were commoner in Sparta than in Athens. The conduct of Agesistrata and Kratesickleia[1] on the death of their husbands, though it is evidence at a later date, shows traces of genuine feeling. In this respect, therefore, the Spartan practice was not remote from modern ideals, but infanticide, eliminating the unfit at birth, offered a solution of the problem which we can only hope to solve by the scientific application of the principles of heredity.

The Spartan method of breeding avoided the pitfalls of analogy; their aim implied a literal acceptance. The modern problem is the selection of qualities on a basis broad enough to represent the natural differentiation of individuals and nations, the problem of a Eugenic ethnology. The Spartans, like the breeder of animals, bred for a single quality and a single uniform type. Setting life on a physical basis, regarding bodily efficiency as the only quality of use to a military brotherhood, they pursued their aim with the ruthless precision of the breeder. It was a narrow and egotistical aim, but consistent with a Constructive scheme of Eugenics which can only be maintained by eliminating undesired elements at birth.

At the same time the selection of physique has certain obvious advantages. To the Greeks, be-

[1] Plut., "Agis," 20; "Kleom.," 37, 38.

lieving only in the beauty of the spirit when reflected in the beauty of the flesh, the good body was the necessary correlation of the good soul. Though there was no conscious assertion of this relation among the Spartans, there may have been some latent recognition helping to justify their aim. Moreover, while there is no dynamometer of intelligence, physique admits of easy estimation. There is therefore a certain justification for the simple and unscientific dogma of the Spartan lawgiver: "If the parents are strong, the children will be strong."

The Spartans realized that to secure the fitness of the child it must be guarded even before birth by bestowing due care on the food and habits of the future mother. Antenatal influences explain many of the apparent anomalies of heredity, but, while recognizing the value of the Spartan aim, a nobler conception of humanity rejects their method. Sedentary occupations can no longer be assigned to slaves.[1] Society still rests on a basis of lower labour. He "that holdeth the plough" must still "maintain the state of the world," but he is no longer a mere means, a living instrument, excluded from every political privilege and every social reform. The limited and aristocratic Eugenics of Sparta is amplified into a scheme which embraces every class of the community. But this extension involves fresh complexities. By state interference in various ways, such as endeavours to modify "the

[1] Xen., "Reip. Lac.," 3.

influence of the factory system on the women who would be the mothers of the next generation," we attempt to palliate where the Spartans were content to neglect.

The Spartans recognized that environment as well as heredity is a factor in the development of man. There is a scheme of physical education for men and women, and the one narrow aim was so exclusively pursued, that it was said of them that they could not even read.[1] Modern education on its wider basis affords no parallel with the Spartan, but the bureaucratic control of the buagor, the ilarch, and the melliran, and a common centre of supervision have similarities with certain modern ideals. It is claimed that the control already established for certain classes of children, during limited periods, should be exerted over all children, and extend through the whole course of their evolution. There is to be compulsory control as well as compulsory education, and there is an institution which is to be frequented by all children, on whose development there is no effective control at home.[2] These methodically organized institutions, harmonizing well enough with the monistic view of the Spartan state, could never be adjusted to modern conceptions of individual right.

Apart from the question of quality, there is also the question of quantity. Modern Eugenists are

[1] Isoc., "Panath. Or.," xv. 277.

[2] Dr. Querton, "On Practical Organization of Eugenic Action." Read before Eugenics Congress.

faced with the problem of the diminishing numbers of the upper classes and the rapid multiplication of the lower. The Spartans were concerned with the same problem in a different aspect; this tendency, suffered to run its course unchecked, meant to them extermination by war; to-day it means elimination by disease.

The Spartans were a small immigrant band, face to face with an extensive and powerful autochthonous population—a camp in the centre of a hostile country. "We are few in the midst of many enemies" was the warning spoken by Brasidas,[1] and this position of constant danger affected the problem in two ways. There must be no falling birth-rate among the Spartans, no unchecked fertility among their subjects.

Three measures were employed to maintain the number of the Spartans: prevention of emigration,[2] penalties for celibacy,[3] and rewards for fertility.[4] The man with three children was to be excused the night watch, the man with four was to be immune from taxation. A third measure known to the ancient world, the enfranchisement of aliens, though adopted at times under the ancient Kings,[5] was rendered impossible by the later exclusion of every foreigner from the land. Avoidance of moral or physical corruption was set before preservation of

[1] Thuc., iv. 126.
[2] Xen., "Reip. Lac.," xiv.
[3] Plut., "Lyc.," 15; Athenæus, xiii. 553*c*.
[4] Ar., "Pol.," 1270*b*.
[5] *Ibid.*, 1270*a*.

numbers.[1] The alien is a disturbing element in any Eugenic scheme.

The natural tendency of civilization, a declining birth-rate, would have brought destruction upon Sparta. Nevertheless, this attempt to maintain the numbers of the citizens seems to have met with little success. Xenophon speaks of Sparta as having the smallest population in Greece.[2] Aristotle tells us that once the numbers of the Spartans amounted to 10,000: in his time they were not even 1,000, though the country was able to support 1,500 horse and 30,000 foot. The city unable to support one shock was ruined. Aristotle finds the cause of failure in the unequal division of property.[3] But nowhere have attempts to interfere with the downward course of the birth-rate met with success: they were doomed to failure in Sparta as they failed in Imperial Rome. There is a moral in the tale of Plutarch, that Antiorus, the only son of Lycurgus, died childless, dooming the race to extinction.[4]

In limiting the numbers of the subject population, the drastic methods of the *κρυπτεία* admitted of no failure. Infanticide was brutal, but it was set on a rational basis; this indiscriminate and covert massacre on the vague pretext of fear or suspicion, was possible only to a people not fully emerged from barbarism. On one occasion more than 2,000 were made away with, "on account of their youth and great numbers." Even Plutarch, with all his

[1] Plut., "Lyc.," 27.
[2] "Reip. Lac.," 1.
[3] "Pol.," 1270*a*.
[4] "Lyc.," xxxi. 25.

Laconism, censured the κρυπτεία as an "abominable work," and refused it a place among the measures of Lycurgus.[1]

The productivity of the worst classes must be checked no less to-day in the interests of Eugenics, but not by such methods as these. We may improve their environment, so that response to improved conditions may result in a natural limitation, or with the increase of knowledge we may forbid their propagation, but the method of massacre died with the decadence of Sparta.

These inchoate Eugenics had their measure of success. The modern school of Anthropo-geography, following in the footsteps of Mill and Buckle in an older generation, would attribute to material environment their limitations and their greatness. Surrounded by discontented subjects and hostile serfs, with enemies at their very doors, and no point in the land a day's march away, it was natural that they passed their days as in a camp: shut away in "hollow Lacedæmon with its many vales," it was natural that they had no share in the progress of the world round them. But in the seventh century Lyric poetry had found a new home on the banks of the Eurotas. Terpander the Lesbian, Alcman the Lydian, Cinæthon the Spartan, show that there was a time when Lacedæmon also had cultivated the Muses. The nobles lived luxuriously: the individual was free.

The Lycurgean discipline was therefore no arbi-

[1] "Lyc.," xxviii. 20.

trary product of circumstances: it was a deliberate and calculated policy. As such, it is easy to criticize its limitations, to assert that it mistook the means for the end, that it fitted the citizen only for war, and unfitted him for peace.[1] It is wilful neglect of facts to declare that the only success achieved was the success of the disciplined against the undisciplined: that the only veneration the Spartans received was the veneration of conquerors.[2]

Their whole aim was narrow, calculated, and egotistic; their Eugenic system was merely ancillary to the one occupation of war: neglecting all the complexity of man's psychical nature, it aimed at the improvement of a single aspect of humanity, and that not the highest: sacrificing the Sudra caste in the interests of the Brahmins, it aimed only at the production of a breed of supermen. Nevertheless, it is clear that within its narrow confines this rude system succeeded. Sparta has been proclaimed the only state in which the physical improvement of the race was undoubted, while the chastity and refinement of both sexes was unimpaired.[3] "It is easy to see," declared Xenophon, "that these measures with regard to child-bearing, opposed as they were to the customs of the rest of Greece, produced a race excelling in size and strength. Not easily would one find people healthier or more physically useful than the Spartans."[4]

[1] Ar., "Pol.," 1325*a*, 1333*b*. [2] *Ibid.*, 1338*b*, 1324*b*.
[3] Mahaffy, "Greek Literature," vol. ii., part 1, p. 201.
[4] "Reip. Lac.," i. 10; v. 9.

The Lampito of Aristophanes, introduced as the representative of her race, shows how the Spartan women impressed the rest of Greece. Beauty, physique, self-control—these were the accepted characteristics of the type.[1] Sparta was the proverbial land of fair women.[2]

The direct influence of Spartan Eugenics was infinitesimal. It was an honour to have a Spartan nurse and good form to affect the rude abruptness of the Spartan manner, but no attempt was ever made to adopt their training or institutions.

There were the paper-polities of Plato and Diogenes, but their legacy to the world was only "Words and writings."[3] The Athenians of the fifth century had nothing but contempt for the institutions of their rivals, voiced in the patriotic travesties of Euripides.[4] Sparta was the national foe, and Sparta fell into early decadence.

Xenophon lamented that in his time the Spartans neither obeyed God nor the Laws of Lycurgus.[5] Already, when Plato wrote the Laws, there are signs that Sparta was falling into disrepute, and the Politics of Aristotle shows an imminent degeneracy: Ares bears the yoke of Aphrodite, liberty has become licence. Agis III. attempted in vain to restore the old Lycurgean discipline, which had become a mere

[1] "Lysistrat.," 78.

[2] Athenæus, xiii. 566*a* (*καλλίστας γεννώσης τὰς γυναῖκας*).

[3] Plut., "Lyc.," 31.

[4] Thuc., ii. 39; Xen., "Mem.," iii. 5; Eurip., "Androm.," 597, etc.

[5] Xen., "Reip. Lac.," xiv. 7.

shadow and a name. Kleomenes attained some measure of success, but foreign arms intervened. Nevertheless, the empty husk of the ancient system lasted with strange persistence through centuries of neglect. If the Spartan Eugenics had taken some account of those other tendencies of its earlier history, its influence on the world might have been of greater importance.

The Ancients, struck by certain obvious resemblances, believed that the Spartan constitution was in part a plagiarism of the Cretan. The laws and institutions of both countries aimed at creating a class of warriors,[1] but in general most new things are an improvement upon the old,[2] and the Cretans never reached back beyond the education of the youth.

The physical training at Crete may have suggested its parallel at Sparta, but its broader basis of culture belonged to Crete alone. Like Sparta, Crete endeavoured by artificial interference to regulate the growth of its population, raising its numbers by forbidding celibacy, reducing them by a curious measure which has no parallel elsewhere.[3] In this matter of Eugenics, therefore, Sparta owes but little to Crete.

The constitution of Carthage was also declared by Aristotle to bear a close resemblance in some particulars to the Spartan.[4] But there is no trace

[1] Plato, "Laws," 630 E. [2] Ar., "Pol.," 1272*a*.

[3] *Ibid.*, 1272*a*. According to McLennan, the practice would be the result of female infanticide.

[4] *Ibid.*, 1273*a*.

at Carthage of any institution having a Eugenic tendency. There is infanticide, but infanticide merely as a phase of a general custom of human sacrifice.[1]

There is, however, one other ancient race, amongst whom we find traces of Eugenic practice—the sturdy warriors of Germania Transrhenana, or Barbara. They were not, indeed, an utterly primitive people: of art and literature they were almost entirely ignorant; of the civilization of Greek and Italian cities they knew nothing; but they possessed a definite social organization, and a religion not lacking in nobler elements.

Unfortunately, our only authority is a writer concerned more with ethics than history, treating facts with a certain Procrustean freedom to fit a preconceived morality. History becomes the handmaid to moral contrast, and there are the errors of imperfect information, on which no light is thrown by others who have dealt with this same people.

It was a system, so far as one could judge, that relied on positive methods. "To limit the number of their children or to put to death any of the later born, they regarded as an act repugnant to human nature (*flagitium*). There are no rewards for the childless."[2] Two distinct points are involved in this approbation—uncontrolled reproduction and absence of callous infanticide. At Rome, among the many excuses for exposure or infanticide recog-

[1] Diod., xx. 14; Plut., "De sera num. vindic.," 6.

[2] Tac., "German.," 19 and 20.

nized by custom, was the birth of a child after the will had been made.[1] This does not necessarily prove the total absence of infanticide among the Germans; it merely indicates the prohibition of the practice from callous indolence or on the grounds of superfluity. Tacitus, however, makes the same statement of the Jews, to whom, having before them the injunction to increase and multiply, the whole practice would naturally be abhorrent. Possibly, therefore, the Germans, in contradistinction to almost all ancient peoples, had refused to sanction the custom on any basis whatever.

In the matter of uncontrolled reproduction, a high birth-rate, though negatived almost invariably by a corresponding death-rate, was a natural ideal amongst a people threatened with constant depletion by the severity of military selection. Tacitus, ignorant of relativism, failed to see that the evil he deprecated in Rome was the inevitable result of the tendency which he lauded amongst the Germans.

The basis of selection was stature as well as strength. Infanticide, therefore, would have been impossible as a check on failure. Early marriages were forbidden, but instead of a penalty on the childless, we find an encouragement of celibacy.[2] It seems, therefore, that there was some endeavour to limit the number of children, which found no place in the Tacitean scheme of German morality.

In place of the Spartan "compliance" we find polygamy on a limited scale, conceded as a privilege

[1] Cic., "De Oratore," i. 57. [2] Cæs., "Bell. Gall.," vi. 21.

only to a few "on account of noble birth." Satisfied with this regulation of nature, they paid no attention to nurture. The children grew to manhood, naked and uncared for, with no distinction between master and slave. The women, it seems, like the women of the Republic, followed their husbands into war.[1]

The results of this system appear inevitable enough. We find a race conspicuous for its stature and strength, but conspicuous also for its absence of moral courage. The children, says Tacitus, reproduce the vigour of their parents, and he speaks of their stature and strength of limb as the admiration of the Romans. Their tallness is frequently a theme for comment in the "Histories."[2] When Rome fell to the Flavianists, it was assumed that anyone of exceptional stature was a Vitellianist and a German.

But they were mere machines with no moral courage to turn their strength to account. With Spartan training to develop the raw material of inheritance, they would have been a different race. They were incapable of enduring hardships to which they had not been inured:[3] their frames were huge, but vigorous only for attack; their strength was great for sudden effort, but they could not endure wounds.[4] Their courage was the frenzy of the Berserk, not the disciplined valour of the Spartan hoplite.

[1] Strabo, 20.
[2] "Hist.," iv. 1. 14; v. 14.
[3] "German.," 4.
[4] "Annals," ii. 14.

In time their stature must have deteriorated. While the children of tall parents tend to be taller than the average, there is a gradual return to the mean. However severe and continuous the selection, there is a point beyond which advance cannot go.[1]

The German Eugenics seem to have left no impression upon the Roman mind. Their stature and physique were attributed merely to chastity.[2] The German system, therefore, led nowhere in antiquity: the Spartan system led on to the theories of Plato and Aristotle.

The fifth century at Athens was an age of criticism and self-consciousness: the era of reflection had followed the era of intuition, and scepticism brought iconoclasm which shattered the ancient symbols. There were abolitionists, collectivists, social reformers in every phase, but no scheme of Eugenics till Plato. Intensity of anti-Spartan sentiment may have put such theories beyond the pale of the patriot. Social reformers could find their arguments for communism or promiscuity among Hyperboreans, Libyans, and Agathyrsi; but Eugenics was a creed peculiar to the hereditary foe. Nevertheless, certain aspects of the question had been for centuries the commonplace of Greek thought. Even in the proverbial stage of Greek philosophy the gnomic poets among their isolated apothegms have caught some facets of the truth.

[1] See *Eugenics Review*, July, 1912; Gossack, "Origin of Human Abnormalities."

[2] Cæs., "Bell. Gall.," vi. 21.

In Theognis there is a glimpse of the analogy between the breeding of animals and human kind and almost an anticipatory scheme of Eugenics:[1] "We seek well-bred rams and sheep and horses and one wishes to breed from these. Yet a good man is willing to marry an evil wife, if she bring him wealth: nor does a woman refuse to marry an evil husband who is rich. For men reverence money, and the good marry the evil, and the evil the good. Wealth has confounded the race."

"His starting-point is the true one," remarks the ancient commentator, "for he begins with good birth. He thought that neither man nor any other living creature could be good unless those who were to give him birth were good. So he used the analogy of other animals which are not reared carelessly, but tended with individual attention that they may be noblest. These words of the poet show that men do not know how to bear children, and so the race degenerates, the worse ever mingling with the better. Most people imagine that the poet is merely indicting the custom of marrying the low-born and vicious for the sake of money. To me it seems that this is an indictment of man's ignorance of his own life."[2] Lycurgus, according to Plutarch,[3] used this analogy to demonstrate the folly of other cities where the husbands, keeping their wives in seclusion, beget children from them even if mad, diseased, or past

[1] Theog., v. 183.

[2] Stobæus, lxxxviii. 14 (Ξενοφῶντος ἐκ τοῦ περὶ Θεογνίδος).

[3] Plut., "Lyc.," xv. 25.

their prime. This was the starting-point of the Spartan Eugenics, as it has been the starting-point of the Modern: at Athens it was never more than the sententious maxim of an early poet.

The evils of disparity of age, the thought that "one must consider the ages of those who are brought together,"[1] had formed themes for Hesiod,[2] Sappho,[3] and Theognis.[4] Pythagoras, it is said, had discussed the bad effects of early marriage:[5] Solon had legislated upon it;[6] and had dealt no less with that other recognized evil of antiquity and modern times, the mercenary marriage.[7]

A problem that obsessed the Greeks was the relative influence of nature and nurture, of gametic and non-gametic causes. It is a question almost invariably of morals, though the dominant æstheticism of Greek thought may have reduced the problem to a single issue: "Thou art unpleasing to look upon and thy character is like to thy form."[8]

"Most children are worse than their parents, few are better."[9] "The evil are not wholly evil from birth, but associating with the evil they have learnt unseemly deeds."[10] "Sometimes a noble offspring does not spring from well-born parents, nor an evil child from useless parents."[11] But the general view

[1] *Cf.* Stobæus, 71.
[2] 695 *et seq.*
[3] 20.
[4] 457.
[5] Müller, "Fr. Hist. Gk.," ii. 278.
[6] Plut., "Sol.," xx. 25.
[7] *Ibid.*, 15.
[8] Stobæus, xc. 9.
[9] "Odyss.," ii. 227.
[10] Theog., 305.
[11] Soph., "Tyro, Fr." 583.

of heredity was as fatalistic as Ibsenism. No education can make the bad man good: no Æsculapius can cure the moral taint.[1] Just as roses and hyacinths do not spring from squills, so from a slave-woman no free child can be born.[2] Antigone of Sophocles is fierce because her father was fierce,[3] just as the Brand of Ibsen was obstinate because his mother was obstinate.

Modern knowledge has justified the Greeks in attributing this dominance to heredity. Men do not gather grapes of thorns, or figs of thistles: the total contribution of environment is merely opportunity: it can only aid or retard the development of genetic character. The Greeks, except in the dramatic conception of an ancestral curse, or in the inherited pollution of ancient sacrilege, never traced causes back beyond the immediate progenitors. Galton held that the individual was the arithmetic mean of three different quantities, his father and mother, and the whole species of maternal and paternal ancestors, going back in a double series to the very beginnings of all life.[4] Greek thought never concerned itself with this third and unknown datum. Mendelism has brought us back once more to the immediate parents.

Side by side with this interest in questions of nature and nurture is the dawn of that individualistic spirit, which culminated at last in egotistic

[1] Theog., 432.
[2] *Ibid.*, 537.
[3] 471.
[4] "Natural Inheritance."

contempt of offspring and marriage. Heraclitus is the forerunner of Stoicism, Democritus of Epicureanism, and the negative teaching of the sophists is the precursor of that atomistic conception of society which reduced it to a mere complex of self-centred units.

If there had been any attempt to systematize these fragmentary conceptions, we should find it mirrored in the pages of Euripides. All the inconsistencies of current theory are voiced by opposing characters, every speculation that was born "in that great seething chaos of hope and despair," thesis and antithesis but no synthesis before Plato. It is the diagnosis and not the remedy which interests Euripides.

There is the question of the marriage age. It is a baneful thing to give one's children in wedlock to the aged.[1] The aged husband is a bane to the youthful wife.[2] No less is it an evil to wed youth to youth, for the vigour of the husband endures for longer, but a woman more quickly fades from her prime.[3]

There is the denunciation, too, of mercenary marriage. Those who marry for position or wealth know not how to marry.[4] Nature endures, wealth is fleeting.[5] Is it not therefore the duty of the man, who takes good counsel, to marry the noble, and to give in marriage among the noble, and to have no desire for an evil wedlock, even if one should thereby

[1] "Fr." 1 (Phœnix). [2] "Fr." 2 (Dan.).
[3] "Fr." 8 (Æol.).
[4] "Fr." 16 (Melanippe); "Elec.," 1096.
[5] "Elec.," 941.

win a wealthy dower ?[1] There is much discussion of the relative influence of heredity and environment.[2] Is it not wonderful that poor soil, blest with a favourable season from the gods, bears corn in abundance, whilst good soil, deprived of what it should have received, yields but a poor crop, yet with human kind the worthless is always base, the noble never anything but noble ? Is it the parents who make the difference, or the modes of training ?[3] And the answer of the ancients was that " Nature is greatest."[4] How true the old tale that no good child will ever come from an evil parent.[5] The opinion that children resemble their parents is oftentimes proved true.[6] Noble children are born from noble sires, the base are like in nature to their father.[7] If one were to yoke good with bad, no good offspring would be born; but if both parents are good, they will bear noble children.[8] Nevertheless, mortal natures are complex things; a child of no account may be born of a noble sire, and good children from evil parents,[9] but no education can transform the bad child of evil stock.[10] The fairest gift that one can give children is to be born of noble parents.[11] " I bid all mortals beget well-born children from noble sires."[12] And the well-born

[1] " Androm.," 1279 *et seq.*
[2] " Elec.," 941.
[3] " Hec.," 592 *et seq.*
[4] " Fr." 12 (Phœnix).
[5] " Fr." 15 (Dictys.).
[6] " Fr." 10 (Antig.).
[7] " Fr." 7 (Alcmæon).
[8] " Fr." 9 (Meleager).
[9] " Elec.," 368.
[10] " Fr. Incert.," 38.
[11] " Herac.," 298.
[12] " Fr." 17 (Antiope).

man is the man who is noble in character, not the unjust man, though he be born of a better father than Zeus.[1]

Nevertheless, it remains a duty to educate one's children well.[2] Specialized athleticism is as baneful as over-refinement. You cannot fight an enemy with quoits, nor drive them out with the fist. Though war is an evil, military training is an advantage to youth.[3]

Euripides reflects no less the growing cynicism of the age, abusing women, praising celibacy, denouncing the cares and anxieties of bringing up children.[4] There is something, too, of the philosophic egotism of Marcus Aurelius: if you marry, your children may turn out evil; if they are good there is the fear of losing them.[5] But in the "Ion" he speaks with the voice of the old Athenian morality: "I hate the childless, and blame the man to whom such a life seems good."[6]

There is one passage which served as a text for Plutarch's treatise on Education, and might serve no less to-day as a text for Modern Eugenics:

> ὅταν δὲ κρηπὶς μὴ καταβληθῇ γένους
> ὀρθῶς, ἀνάγκη δυστυχεῖν τοὺς ἐκγόνους.[7]

Aristophanes also reflects all the foibles and ob-

[1] "Fr." 11 (Dict.). [2] "Supp.," 917.
[3] "Elec.," 388; "Med.," 295.
[4] "Med.," 1030; "Alc.," 238. 885 *et seq.*
[5] Marc. Aurel., ix. 40; "Fr. Œnom.," 2; "Fr. Incert.," 963. [6] Eurip., 488; "Ion."
[7] Plut., "De Edu.," 2; "H. F.," 1264.

sessions of a sceptical age. The existence of Eugenics at Sparta, robbing the theory of something of the revolutionary aspect which it wears to-day, would perhaps have rendered it less a feature for debate than community of wives or women's rights.

Nevertheless, if Eugenics had ever taken a prominent place in Athenian thought, it would have furnished a richer mine of parody than the fantastic obscenity of the Ecclesiazusæ. It is commonly held that Socrates suggested all the thought and philosophy of the succeeding centuries. We should expect, therefore, to find some cartography, as it were, of Eugenics paving the way for the fuller imaginings of his pupil Plato. If we regard Xenophon as the only trustworthy source for the oral teachings of Socrates, we may seek in the "Memorabilia" for these earlier adumbrations.[1]

We find the old question of nature and nurture, and with it an attempt to solve the problems of heredity. How is it, asks Hippias, "that parents of good stock do not always produce children as good"? To put the dilemma in a modern form, Why is it that personal value is not necessarily the same as reproductive value? And the answer which Socrates suggests is an answer which has been given to the same question to-day. Good stock is not everything; both parents must be equally in their prime.[2] "The apparent anomalies which children present in not reproducing the qualities of their

[1] *Vide* Zeller, "Socrates and his School," p. 100.

[2] "Mem.," ii. 4.

parents only serve to reveal the presence of particular conditions, and among those conditions must be included the changes which organism undergoes by reason of advancing age." [1]

There are other conditions also. Eugenics begins earlier than birth; the unborn child must be protected by bestowing due care on the future mother. A man, says Socrates, has a twofold duty: towards his wife, to cherish her who is to raise up children along with him, and towards children yet unborn, to provide them with things which he thinks will contribute to their well-being.[2] The fatal handicap may have already begun in the starving or overworking of the mother.

But congenital εὐεξία must be emphasized by education: Socrates is deeply impressed with the evils of its neglect both on the physical and spiritual side. The Athenians, not content with neglecting a good habit, laugh to scorn those who are careful in the matter. When will the Athenians pay strict attention to the body?[3] While Euripides denounces the baneful effect of the great athletic festivals, Socrates laments the indifference which could produce an Epigones.[4]

It is no æsthetic view of morals which makes Socrates insist on the need of physical training: he is concerned rather with the effect of ill-health upon

[1] Marro, "Influence of Parental Age." Paper read before Eugenics Congress.

[2] "Mem.," book 2, chap. ii.

[3] iii. 5.

[4] iii. 12.

the mind: the reasoning powers suffer atrophy: ill-health may expel all knowledge from a man.[1]

There must be moral education no less than physical training. "Corruptio optimi pessima" is the warning of Socrates as well as of Plato.[2] The youth with the best natural endowments will, if trained, prove superlatively good. Leave him untrained, and he will become, not merely evil, but degenerate beyond hope of reclaim. The very magnificence of his character makes it impossible to restrain him.

In the Socratic treatment of Eugenic questions there are traces of that individualistic spirit which, neglecting social aspects and regarding only personal consequences, led on in logical succession to abnegation of marriage and offspring. It is not mere momentary desire, says Socrates, which influences human beings in the production of children; nothing is plainer than the pains we take to seek out wives who shall bear us the finest children.[3]

And the penalty for error is the penalty, not of human, but of Divine law. What worse calamity can befall a man than to produce misbegotten children?[4] And so with training: because the city has instituted no public military training there is no need to neglect it in private.[5] No demonstration of a self-incurred penalty is likely to appeal to the degenerate or feeble-minded.

Xenophon was a man of timid and commonplace

[1] iii. 12.
[2] iv. 2; *cf.* "Rep.," 497*b*.
[3] ii. 2.
[4] iv. 4.
[5] iii. 12.

mind, and reported nothing he could not comprehend. We may suspect from Plato that much of the Socratic teaching has been lost, but if there had been any fuller systematization of Eugenics, it is improbable that the Philo-Laconist Xenophon would have failed to leave a record.

Critias, the pupil of Socrates, seems to have advocated something like a Spartan system of Eugenics. "I begin with man's birth, showing how he may become best and strongest in body, if the father trains and undergoes hardship, and the future mother is strong and also trains." [1] But a complete development along Spartan lines begins with Plato, and Socrates led not only to Plato, but to Cynic and Cyrenaic individualism.

Nevertheless, the incivism of the Cynic, bringing with it the belief in a self-centred and isolated self, never involved, like the later asceticism, the entire uprooting of all sexual desire. The wise man will marry for the sake of children, associating with the most comely.[2] Antisthenes employed analogy from animal life, but it served only to point the cry of abandonment of cities and civilization, and return to the simple and primitive. The Cyrenaic no less is *κόσμου πολίτης*, and equally an egotist; but complete negation of social duties and actualization of despair was only possible when Greece had lost for ever the ideal of the city state.

Sparta conceived the first system of practical

[1] "Krit. Müller. Fr. Hist. Gk.," ii. 68.
[2] Diog., ii.

Eugenics; the first formulation in theory belongs to Plato. Archytas of Tarentum, Phaleas of Chalcedon, and Hippodamus, the Haussman of the Piræus, may have anticipated the Platonic communism: the Platonic Eugenics is based on no Utopia, but on a living and successful community. The scheme of the Republic, though it owes a little to contemporary thought, something also to contemporary science, is most of all a speculative development of the Spartan system. In this respect one cannot speak of the Platonic Republic as the perfection of the laws of Lycurgus;[1] nor can it be truly said that if Lycurgus had only put his scheme in writing, it would have appeared far more chimerical than the Platonic.[2]

On the negative side there is infanticide, and approval of the practice of destroying life in the germ. As in that other question of slavery, there are signs that Plato, from his speculative Pisgah, had glimpses of a higher humanity. But he succeeded only in formulating an ineffectual compromise which retained the same evils under another name. Concealment of the newborn child "in an unknown and mysterious hiding-place" is still infanticide.

In an earlier passage copper may rise to silver, silver to gold, and the copper-child of golden parents may be degraded to its own class.[3] This is a higher ideal than that of Aristotle, whose slave, the hope-

[1] Montesq., "Esprit des Lois," vii. 16.
[2] Rousseau, "Émile," 1.
[3] "Rep.." 423.

less product of heredity, can never shake himself free from the trammels of his birth. So to-day Eugenists have recognized that in the mass of men belonging to the superior class one finds a small number of men with inferior qualities, while in the mass of men forming the inferior classes one finds a certain number of men with superior characters. It is suggested that between these two exceptional categories social exchanges should be made, allowing the best of the lower stratum to ascend, compelling the unadapted who are found above to descend to their own level.[1]

But the Platonic dialogues, and on a higher scale the concise lecture notes of Aristotle, are not the mere exfoliation of a finished product of thought, but a gradual development. One idea devours another; there is thesis and antithesis, and the final synthesis, if achieved at all, is found at the end and not at the beginning. When Plato came to formulate a positive scheme of Eugenics, his Spartan model seemed to show him that infanticide in some form was inevitable, when there was no knowledge to control the vagaries of nature. It was the ancient solution of the problem of heredity, and is still the solution of the breeder who "breeds a great many and kills a great many." So the issue of inferior parents and defective children born of good stock are to be "hidden away." Concealment is the

[1] *Cf.* Professor Niceforo, "Causes of Mental and Physical Characters in Lower Classes." Paper read before Eugenics Congress.

Platonic euphemism for infanticide. Men and women, past the proscribed age, are to do their best to prevent any offspring from seeing the light: if they fail, they are to dispose of their issue on the understanding that it is not to be reared.[1]

Plato's critics from the days of Aristotle have concerned themselves with the position of his third class, but in no long period of time this class would have suffered total extinction. Plato solved one problem to raise another. Like the primitive tribes, who, slaughtering every child that was born, were compelled to steal the children of their enemies. Plato, by eliminating the offspring of the lower class, would have forced his guardians to steal their men of copper from their foes. A community needs its lower classes, just as the body needs its humbler organs: subordinate to all, these men of copper are yet the most necessary of all. In his anxiety to breed a race of Eugenes, Plato removed the conditions which made their existence possible. While the children of the lower classes are to be eliminated at birth, nature would have eliminated the children of the upper classes. Plato's pens would have been as fatal as the crèches of Paris or the Foundling Hospital of Dublin.

Besides infanticide there are other methods for dealing with certain types of the unfit. The Platonic theory of medicine is a recurrence to the practice of the primitive savage, who, under pressure of want or war, abandoned the aged and infirm, and left

[1] "Rep.," 461*c*.

them to die of exposure or starvation. Plato would leave the valetudinarian to die because he is incapacitated from fulfilling his appointed task, and will beget children in all probability as diseased as himself if his miserable existence is protracted by the physician's skill.[1]

Herodicus is useless both to himself and to the state, for chronic ill-health, as Socrates taught, reacts upon the mind. It is no part of the physician's task to "pamper a luxurious valetudinarianism": the art of Asclepius is only for those who are suffering from a specific complaint. So the chronic invalid will be left to die, even if he be richer than Midas.

There are two types whom Plato would condemn to natural elimination—the victims of constitutional ill-health, and the victims of self-indulgence.[2] Refused medical aid, they are allowed to linger on, but there is no hint of segregation or custodial care to exclude them from parenthood. Under the later Eugenic scheme it is clear that the offspring of any such unions would have been ruthlessly exterminated: there was no place in the Platonic Republic for the "unkempt" man, glorying in a pedigree of congenital ailment.[3] To-day the limitations of our knowledge render restrictive measures possible only in the case of the feeble-minded.

But apart from the physical degenerate, there is the moral degenerate, no mere encumbrance to society, but an active force for evil. No law of

[1] "Rep.," 407.
[2] *Ibid.*, 408.
[3] Theophrastus, 19 (περὶ Δυσχερείας).

nature operates for his elimination; therefore, like the lower desires of the soul which cannot be tamed to service under the higher self, his growth must be stopped. Society has no course but to put him out of the way.[1] The modern treatment of the morally incurable is humaner than the Platonic, yet lacking in humanity. We pity degeneracy when it takes the form of disease, but when it takes the form of immorality or crime we blame and we punish. The habitual criminal is no less a victim of heredity than the prisoner in Erewhon, "convicted of the great crime of labouring under pulmonary consumption."[2]

Plato bases his constructive scheme on that analogy of the breeder which has formed the premisses, latent or confessed, for all Constructive Eugenics from the days of Lycurgus. "What very first-rate men our rulers ought to be," says Socrates, "if the analogy of animal holds good with regard to the human race!" Glaucon, accepting the analogy literally and without limitation, justifies the harshest strictures that have been levelled against any such conception of Eugenics.[3] In the Platonic Republic, though not in Sparta, there is a race of supermen, the breeders of the human kingdom, arbitrarily interfering with natural instinct in order to produce a noble stock. Plato, recognizing that even in Greece there were limits set to the sphere of the

[1] "Rep.," 410*a*.

[2] Samuel Butler, "Erewhon," p. 72. *Cf.* Bateson. "Biological Fact and Structure of Society," p. 19.

[3] "Rep.," 459.

legislator, and unable to appeal to the cogency of assured knowledge to support his philosophic imperatives, resorts instead to childish subterfuge, "an ingenious system of lots."

But compulsion, or guidance, however veiled, is foredoomed to failure in the case of an institution which can only rest on inclination or an innate sense of duty. Moreover, "custom is lord of all," and custom can only be modified gradually and in the course of centuries: it is only the thinnest surface layer with which the legislator can tamper. No social reform or political progress can be effected by the arbitrary creation of institutions to which there are no answering ideas: external coercion with no correspondent reaction can achieve no permanent good. The basis of law is subjective. Modern Eugenists have recognized that, if there is to be Eugenics by Act of Parliament, the Eugenic ideal must first be absorbed into the conscience of the nation.

The Spartan system of "compliances" is developed into a system of temporary marriages instead of the polygamy of the Germans. The best of both sexes are to be brought together as often as possible, and the worst as seldom as possible. Greater liberty is to be allowed to the brave warrior, but a liberty within restricted limits, and the concession is not for the sake of the individual, but for the good of the state. Plato is the slave of his analogy.

As at Sparta, there is regulation of the marriage age, a commonplace of contemporary thought, and therefore an inevitable feature of any Eugenic

system. The parents must be in their prime of life: this period is defined as twenty years in a woman, thirty in a man. A woman may bear children to the state till she is forty; a man beginning at twenty-five, when he has passed "the first sharp burst of life," may continue to beget children until he is fifty-five. For both in man and woman these years are the prime of physical as well as of intellectual vigour. In Sparta we hear of no definite regulation concerning those who have passed their prime, beyond exclusion from child-bearing. Plato's treatment of the problem is "the only point in this part of the Republic which is in any sense immoral, and a point upon which modern ethics may well censure the highest Greek morals."[1]

As to that second problem, the selection of qualities to breed in, Plato, like Sparta, chose physique, but chose it because he believed that soul depends on body, matter conditions mind. There is no fairer spectacle than that of a man who combines beauty of soul and beauty of form.[2] Physical and intellectual vigour ripen simultaneously. Modern Eugenists no less hold it a legitimate working hypothesis that the vehicle of mental inheritance is at bottom material.[3] There is a further requirement that parents should as far as possible be of similar nature.

[1] Mahaffy, "History of Greek Literature," vol. ii., part 1, 200.

[2] "Rep.," 402.

[3] *Eugenics Review*, July, 1912; Cyril Burt, "Inheritance of Mental Characters."

There is no mention in the Republic of that care for the future mother which was a feature of the Spartan system. But there is a twofold scheme of education adapted for the development of other qualities than the merely physical, the first an ἐγκυκλίος παιδεία diverging little from the customary education of the day, and then that second formulation which was to culminate in the knowledge of the good itself. Once he had shaken himself free from the military ideals of Sparta, Plato, concerned no longer to write a tract for the times, ends by building an ideal city where only gods or sons of gods could live.

In this scheme of education it is recognized that environment no less than heredity plays a part in the development of the individual. The banks of the stream must be cleansed as well as its source. Good environment, καλὴ βοτάνη, is the keystone of the Platonic system; its essence is "nurture." The young citizen is like an animal at pasture; from the things all about him he assimilates good and evil, and what he gathers from his environment becomes embodied in his character. A gifted soul in vitiated surroundings is like a rare exotic sown in unfavourable soil; gradually losing its true nature, it sinks at last to the level of its surroundings. But after all "Nature is greatest." There are lower desires which no good influence can ever spiritualize. Education can only turn to the light the intrinsic capacities of the soul.

The relative influence of these two factors has been

expressed in much the same terms to-day. Men have a considerable capacity for being moulded by environment, no small susceptibility to the influences of education and early training. But these influences operate in a circumscribed sphere. There is in the brain at birth a proclivity towards certain directions rather than others: to this original inherited capacity environment can add nothing: it can only develop or frustrate it. The Socialist who contends that all men should and might be made equal would find no friend in Plato any more than in modern Eugenists.

Finally, there is the question of the regulation of the numbers of the state "to prevent it becoming too great or too small."[1] The Spartan problem was preservation of numbers; the problem of the Republic would have centred about this same aspect in an even greater degree. In a state where the best children were foundlings and the rest were eliminated at birth, the infantile death-rate would have more than counterbalanced any rise in the birth-rate. Moreover, among the adult population there are other factors working for elimination—"wars and diseases and any similar agencies." Military selection is essentially anti-eugenic: not only does it extinguish the best elements of the state, but it removes from the reproducing part of the population large numbers of the selected. Disease, though more the resultant of the crowded conditions following on modern urbanization, found

[1] "Rep.," 423*c*.

its hecatomb of victims even in ancient times. Plato, aware of the ruthless waste of life which attends on Nature's process of elimination, was blind to the tendencies of his own short-sighted scheme.

Obsessed by the idea of the mean and a mystic doctrine of numbers, he would fix the number of the state at an unalterable 8,000. To attain this static equilibrium the guardians are to regulate the number of marriages.[1] The elimination of the lower class by infanticide saved Plato from the needs of a *κρυπτεία*, but the alien is neither expelled nor encouraged; his existence is forgotten. There is little doubt that in no long period of time the Platonic guardians would have been faced with the grave problem of depopulation.

It is recognized to-day that it should be the endeavour of social organization to secure the "optimum" number, and not the maximum number. "To spread a layer of human protoplasm of the greatest thickness over the earth—the implied ambition of many publicists—in the light of natural knowledge is seen to be reckless folly."[2] But there is a natural tendency which limits the numbers of the population to the energy-income of the earth. Among the intelligent classes of a civilized community it is effected by control of reproduction; among the lower classes the same equilibrium is

[1] "Rep.," 460.

[2] Bateson, "Biological Fact and Structure of Society," p. 21.

brought about by a differential death-rate. The Platonic aim was justified biologically as well as from the economic point of view, but his methods were mistaken.

Legislation would have failed in the Republic as it failed in Sparta and Imperial Rome.

Selfish and parochial as the Spartan, the Platonic Eugenics is more an academic dream than a practical method of amelioration. Yet it was an essential step towards progress when Eugenics, divorced from militarism, found a place for the intellect of the philosopher King beside the physique of the warrior.

From the Republic we pass to the "Politicus." A work intended as a "metaphysical exercise in the art of differentiation" has merely a parenthetic concern with Eugenics. We find, however, a brief and fantastic adumbration of a constructive scheme.

In the Republic selection was on the basis of physique and similarity of character; in the Politicus Plato's aim is the fusion of contrasted temperaments. Rightly recognizing that the law of sexual attraction is "like to like,"[1] he would yet set himself in opposition to the simple psychology of the lover.

In the Protagoras Socrates had maintained that there was only one virtue; in the Politicus Plato asserts not only a partial opposition between distinct virtues, but a similar opposition pervading art and nature. It is the royal art to weave a state of

[1] "Polit.," 310. *Cf.* Havelock Ellis, "Studies in Psychology of Sex," vol. iv.

one texture out of the warp and woof of human society. Courage wed to courage through many generations culminates in insanity: the soul full of an excessive modesty mated to a similar soul becomes in the end useless and paralyzed. Therefore opposite must be wed to opposite, so as to effect a fusion of characters in the child. Content to lay down principles, Plato makes no mention of the means by which he would achieve his end.

The Platonic hypothesis of fusion finds no verification in Mendelism. The most noticeable point in human inheritance is the frequency with which children resemble one parent to the apparent exclusion of the other. The phenomena of "coupling" and "repulsion," of dominant and recessive characters, under the present limitations of our knowledge, render impossible, even if desirable, any attempt to interlace the warp and woof of society *more Platonico*. The well-attested fact of dichotomy in human inheritance would effect the complete reversal of Plato's aim.

From the fantastic laconism of the Republic and the visionary parenthesis of the Politicus we pass to the palinode of disillusioned senility, the Laws. Like Lear, Plato has brought up ungrateful children, and they have turned against him. An Athenian ideal supersedes the Spartan; he would show that his principles are perfectly consonant even with Athenian ideas; he would modify them till they came within the scope of practical action, building a "City of Cecrops" in place of his "City of God."

Yet in the background there are still traces of his old ideal. As in the Politicus, the aim of marriage is to be the combination of opposites. "Children," says Apuleius, "are to be conceived in the seed-bed of dissimilar manners." The headstrong must mate with the prudent, and the prudent with the headstrong, tempering their natures as wine is tempered by water.[1] But not only is there to be a fusion of characters, there is to be a combination also of status and income: the rich must not marry the rich, nor the powerful the powerful. This triple basis of selection, with the infinite perplexities it involves, is the *reductio ad absurdum* of the Platonic thesis of fusion.

Modern Eugenists, faced with the difficulties of selection, have attempted to infer the aptitude of individuals from their social and economic position. This would be a question of acting, so that marriages would be effected predominantly amongst the wealthy and prevented as far as possible among the poor.[2] But Plato was not concerned with the relation between the economic and psychophysical élite, or with proving that the former were the product of the latter. On the contrary, obsessed by the idea of harmony, he would wed the rich to the poor, the poor to the rich.

The Platonic conception of marriage implies an irrational universe. Personal inclination is to be

[1] "Laws," 773*d*.

[2] *Cf.* Achille Loria, "Psychophysical and Economic Élite." Paper read before Eugenics Congress.

sacrificed on the altar of political expediency. Nevertheless, Plato recognized the power of the "myriad voices" of opinion. "In the case of marriages, births, and patrimonies he swerves from the rules laid down for the former commonwealth by making marriages an affair of individuals, and the business of the suitors themselves private."[1] He realizes that legal compulsion in such matters would arouse anger and ridicule. Therefore, like modern Eugenists, he would trust to the power of public opinion.

The state is to be monogamous, and, as in Sparta and the Republic, there is regulation of the marriage age. A woman is to marry between the ages of sixteen and twenty, a man not earlier than twenty-five[2] or thirty,[3] and not later than thirty-five. The period of child-bearing is to last for ten years; at the end of that period, if there are no children and the parents are free from censure, honourable divorce is to be conceded.

As at Sparta, there is to be care for the future child, set on a wider basis of science. There are times when incontinence, ill-health, moral delinquency of any kind leave their impress upon the mind or body of the offspring. Parents must bear in mind that they are handing down the torch of life to future generations.[4]

Eugenics is being studied from the point of view of medical science. Already in the Republic Plato

[1] "Apul. Dogmata Platonis."
[2] "Laws," 772*d*.
[3] *Ibid.*, 721*a*, 785*b*.
[4] *Ibid.*, 776*b*.

had owed something to the teaching of Hippocrates,[1] and in this discussion of prenatal influences we may trace a further debt. "To form a child from birth to the best constitution, first of all care must be taken of the seed itself, then of food, drink, exercise, quiet, sleep, desires, and other things, all of which Plato has carefully studied."[2]

The Modern Eugenist in such "dysgenic" influences as alcoholism finds an explanation of the apparent anomalies of heredity. All forms of degradation, physical, intellectual, moral, fall upon the degenerates who are the offspring of such parents.[3] But such a system of espionage as Plato proposes is entirely repugnant to modern ideas. For the first ten years of married life the parents are subject to continual supervision.[4] Inquisitorial methods can only achieve negative results.

The educational scheme of the Laws is a very different thing from that of the Republic. Pitched at a level which makes it possible for all, it leads to no final knowledge of the good. There are Public Infant Schools, but education is to cease after the age of six. Besides gymnastic and music, there is some training in the sciences, but the ideal is Pythagorean rather than Platonic.

Modern Eugenists lay less stress on training, not

[1] Galen., p. 875 (*περὶ ἰατρικῆς καὶ γυμναστικῆς.*).

[2] Galen., "Hippoc. et Plat.," p. 465.

[3] Magnan and Filassier, "Alcoholism and Degeneracy." Paper read before Eugenics Congress.

[4] "Laws," 784*b*.

because their knowledge of heredity is greater, but because modern conditions curtail the opportunities of the educationist. The citizen of the Republic and the Laws had no need of " bread-studies."

No less than in the Republic Plato recognizes that education by itself cannot achieve everything. Men well educated become good men: without gymnastic and other education neither soul nor body will ever be of much account.[1] But a fortunate nature is as necessary as a good education, and those of the Athenians who become good men become good without constraint by their own natures. Only a few can achieve perfect happiness, and these are they who divine and temperate, and gifted with all other virtues by nature, have also received everything which good education could impart.[2]

In addition to education and heredity, Plato, influenced, perhaps, by the treatise of Hippocrates, recognizes the influence of material environment. There is a difference in places, and some beget better men and others worse. Some places are subject to strange and fatal influences by reason of diverse winds and violent heats or the character of the waters. Again, there is the character of the food supplied by the earth, which not only affects the bodies of men for good or evil, but produces the same result on their souls. But geographic environment cannot produce a given type of mind any more than education: it can only

[1] " Laws," 641*c*, 766*a*. [2] *Ibid.*, 642*d*, 992*d*.

foster or thwart heredity. It merely determines what shall actually be by selective destruction of the incompatible.

As to the negative aspect of this scheme, Plato would segregate the madman and expel the pauper. The madman is not to be seen in the city, but the responsibility rests upon the relatives, not upon the state. If they fail in their duty, the law will punish them. The treatment of the insane was a difficult problem in an age when there were no asylums.

There is another problem, also, which has assumed far larger proportions to-day owing to the growth of humanitarian sentiment and the enormous numbers of the modern state. Plato has a simple and ruthless way with the pauper. In a properly constituted state the righteous man will not be allowed to starve: there is no excuse for the beggar. "If such a one be found, he shall be driven out of the market-place, out of the city, out of the land, that the state may be purged of such a creature.[1] When a city is small, there is no difficulty in maintaining the poor; such a prohibition might have been enforced without difficulty in an ancient state. We may approve of the simple thoroughness of the Platonic method, but the complexity of modern conditions has rendered its adoption impossible.

In the eyes of the Socialist unemployed and unemployable alike are the victims of the social

[1] "Laws," 936*c*.

system: to the Eugenist, the chronic pauper is the victim of the germ-plasm—heredity. With increased knowledge to justify restrictions, the modern state may be purged of the pauper more slowly, but no less surely, than the Platonic state of the Laws.

Plato, moreover, recognized bodily or mental defects as a bar to marriage, though not viewing the question from its Eugenic aspect. He is concerned with the parents, and not with the children. The law does not forbid marriage with an orphan who is suffering from some defect; it merely refrains from compulsion. Modern Eugenists, concerned with classifying such defects into transmissible and non-transmissible, regard the question from a different view-point. In the matter of inspection to decide the fitness of age for marriage there is something of the idea which came to life again in More's "Utopia" and Campanella's "City of the Sun."[1]

Finally, there is the question of the numbers of the population. It is no definitely Eugenic conception that leads to the limitation of 5,040: there is a certain Malthusian element, and something of a prepossession with a mystical doctrine of numbers. "The means of regulation are many," but the means of the humaner Laws are not those of the Republic. In the case of an excessive population the fertile may be made to refrain, or, as a last resort, there is "that old device," the colony. Faced with the opposite extreme, the rulers will

[1] "Laws," 925 *e* and *b*.

resort to rewards, stigmas, and advice; but if disease or war bring devastation, no course lies open except to introduce citizens from without.[1] Births and deaths must be registered, in order to make it possible to check the numbers of the population. There is no *κρυπτεία*, no *ξενηλασία*, no infanticide, though it seems that Plato would concede the practice of destroying life in the germ. It is only in the case of some such cataclysm as Plato anticipated that legislative interference with questions of quantity is justified.

Even in this endeavour to sacrifice ideals to possibilities there is still the a-priorism of the visionary. There is more humanity, more concession to the infirmities of human nature, but little that comes within the scope of practical action. Neither the legislation of the Republic nor the precepts of the Laws could have ever realized the Platonic dream of Eugenics.

From Plato we pass to Aristotle and the culminating period in the history of Ancient Eugenics. The Aristotelian scheme is almost entirely negative and restrictive. There is infanticide, but infanticide in its last phase, exposure of the imperfect and maimed, and, in the case of superfluous children, destruction of life in the germ. There is no fantastical scheme for the fusion of parental temperament, no rigid selection on the sole basis of physique.

Like Plato, Aristotle believed in the intimate

[1] "Laws," 741.

relationship between psychological phenomena and physical conditions.[1] Body stands to soul in the relation of matter to form, potentiality to actuality; soul is the entelechy of the body.[2] Body being prior chronologically to soul, demands attention first, but only for the sake of the soul.[3] Care, therefore, must be taken that the bodies of the children may answer the expectations of the legislator.

There is no need for a man to possess the physique of a wrestler in order to be the father of healthy children; neither must he be a valetudinarian nor physically degenerate. There is a *via media* between the extremes of specialized athleticism and physical incapacity, and it is this mean which is the desirable condition for both men and women. The valetudinarian who would have been left to die in the Republic may one day be eliminated by the humaner methods of Aristotle. There is much evidence to prove that physical weakness is a case of simple Mendelian transmission.

As at Sparta and in the states of the Republic and Laws, there is limitation of the marriage age. Aristotle recommends the difference of twenty years between the ages of husband and wife, or, more accurately, the difference between thirty-seven and eighteen. Comparison with the marriage age defined in the Republic and Laws shows that ancient

[1] "De Anim.," 402*b*, 8.
[2] *Ibid.*, ii. 1, 412*a*, 28.
[3] "Pol.," 1334*b*.

thought had decreed no definite period. Four reasons incline Aristotle to select these ages. Since the procreative power of women stops at fifty, the harmony of the union will be preserved by insuring that husband and wife shall grow old at the same period of time. The disadvantages which attend too great nearness or distance in age between father and child are also avoided. More important than all, these ages, consulting the physical well-being of husband and wife, afford the best prospect of well-developed children.

It is possible to approve of the postponement of marriage till eighteen, or even later; but the disparity of ages seems unnecessarily great. Aristotle, studying the results of early marriage in other cities, deplored its baneful effect on physique. Modern Eugenists point no less to the effect on the moral character of the offspring.

Like Sparta and Plato, Aristotle forbade those past their prime to rear children to the state. Marriage is thus divided into two periods, and this first period is to last for seventeen years, not ten as in the Laws. Moreover, he would fix even the season for contracting marriage, and in conformity with Pythagoras and Greek custom generally, chooses Gamelion. To-day it is held that neither the vitality of the offspring, their physique, nor their intellectual capacity, show any clear correlation with the season of birth. "There is no atavistic heritage of a special season for reproduction which the human race have originally shown

analogous to what one finds to-day in many species of animals."[1] "The married couple ought also to regard the precepts of physicians and naturalists." Aristotle, belonging to an Asclepiad family, received the partly medical education which was traditional in such families. Some of his encyclopædic writings deal with medical subjects, and he is said to have practised medicine as an amateur. This is a further stage of the tendency which had begun with Plato's debt to Hippocrates.

Care for the child is to begin before the cradle. And Aristotle insists, like the Spartan legislator, on the avoidance of sedentary occupation and the need for a proper dietary. But he is concerned not only with effect on physique, but also, like Plato, with effect on the mind.

The first seven years of a child's life are to be spent at home, not in the crèches of the Republic, nor in the public infant schools of Plato's Laws. This is to be a time of games, "mimicries of future earnest," under the charge of the inspectors of children, for Aristotle held with Plato that the majority of our likes and dislikes are formed in these early ages. Education is to run in cycles of seven years; the child is to be controlled at every period of its evolution. From the age of seven to puberty there are state-controlled gymnastics, but these gymnastics, unlike the Spartan, are merely a means to a further end—the training of reason from

[1] Gini, "Demographic Contributions to the Problems of Eugenics." Paper read before Eugenics Congress.

puberty to the age of twenty-one. After this education ceases, and the young man brings body and mind, fully developed, to the service of the state. Aristotle's scheme is merely adumbrated: there are scattered suggestions rather than co-ordination, and the last stage of science, which is to cultivate the reason, is never mentioned at all.

Aristotle, like the Ancients generally, recognizes the importance of both environment and heredity. There are three stages in the formation of character, nature, custom, reason: innate potentiality, environment, self-direction by the light of a principle. We are born good, we have goodness thrust upon us, we achieve goodness. Heredity to Aristotle explains the slave just as certainly as it explains those who never will be slaves; yet to admit emancipation for all slaves is to confess that there is no slave by nature without the potentialities of full manhood. It is true that some men from the beginning are fit only for that lower work on which the fabric of society must rest. The maintenance of heterogeneity is an essential condition of progress: there must always be the *minuti homines* at the base of things, though we have long since passed from the permanent grades of Plato, Aristotle, and the Middle Ages. Plato, indeed, at one period seems to have conceded that the man from the copper class might rise to the silver or gold, and it is at this that social reform must aim, not to abolish class, but to provide that each individual shall, as

far as possible, reach his proper stratum and remain in it.[1]

Like Plato, Aristotle recognizes that there are victims of heredity who can never be made good by education.[2] But this factor of heredity is amenable to no certain control. Helen may boast of her immortal lineage, but those who think it reasonable that as a man begets a man and a beast a beast, so from a good man a good man should be descended, these fail to see that, though such is the desire of nature, her failures are frequent.[3] Nature's aim is perfection, to make this the best of all possible worlds; but there are failures because matter is not always congruous with form.[4] But "Nature's defects are man's opportunities": matter must therefore be helped as far as possible to the realization of its true form by the human agency of education.

So much importance did Aristotle attach to education that, like Sparta, he would make it entirely an affair of the state. There is to be one educational authority and one sole system of education.

The laws of Aristotle are as catholic as the laws of Alfred: "the legislator must extend his views to everything."[5] Therefore his Eugenic scheme will be enforced by law. His aim is to embody public

[1] *Cf.* Bateson, "Biological Fact and Structure of Society," p. 33. [2] "Pol.," 1316*a*. [3] *Ibid.*, 1255*b*.
[4] "De Cæl.," 271*a*, 33; "Gen. An.," iv. 4, 770*b*, 16.
[5] "Pol.," 1333*a*.

opinion in law, not to educate opinion to such a point that law will become unnecessary.

"Every city is constituted of quantity and quality."[1] Aristotle, therefore, no less than Plato, would fix an ideal limit to the population as well as regulate its quality. In the Aristotelian scheme, as in the Platonic, there emerges a certain Malthusian element; but it is a legal ordinance and not a natural law: it is to prevent population from interfering with the equalization of lots, not from outrunning the limits of subsistence. He conceived that Plato's plan of unigeniture made it more than ever essential that there should not be too many sons in a household, and yet, in his view, the Platonic means were insufficient. But there is also the conception of the mean, of an enclosing limit or πέρας, flowing naturally from the teleological method. Just as a boat can no more be two furlongs long than a span long, so a state can no more have 100,000 citizens than ten.[2] Its essence lies in the fact that it can easily be comprehended as a whole.

Yet, though Aristotle held the State to be a natural organism, he would not concede that hypertrophy was prevented by natural laws without the need for human co-operation. It is absurd to leave numbers to regulate themselves, according to the number of women who should happen to be childless, because this seems to occur in other cities.[3] Rejecting as a mere palliative the remedy of coloni-

[1] 1296*b*. [2] "Eth.," 9, 10, 3. [3] 1265*b*.

zation, which Pheidon of Corinth had suggested, and Plato had kept in the background of the Laws, he insisted that a limit must be set to the procreation of children, even during a seventeen years' term. When infractions occurred—and one would imagine that under such circumstances they would be of frequent occurrence—there is not to be exposure, which is impious on the ground of superfluity, but destruction of life in the germ.

To-day limitation of numbers among the upper classes of the community is being brought about naturally by the increase of foresight and self-control. It is the lower classes whose reckless propagation constitutes the problem of Modern Eugenics. Aristotle, denying these classes the rights of citizenship, and treating them politically as cyphers, sets them outside his scheme of social reform. The number of slaves, resident aliens, and foreigners, is to be left to chance, "and it is perhaps necessary that their numbers should be large."

The Aristotelian Eugenics, therefore, are as selfish and parochial as the Spartan. As in the animal body, the homogeneous are for the sake of the heterogeneous.[1] Where Eugenics is most necessary, Eugenics is denied; the man who performs a task which ruins his body or his mind is set beyond the pale as a mere living instrument. This was the simple pre-humanitarian solution of a difficult problem. But Aristotle recognized, as Eugenists recognize to-day, that any scheme of constructive

[1] Arist., "Part. An.," ii. 1.

Eugenics must be set aside as visionary and impracticable,[1] so slender is our knowledge of the genetic processes of man. Aristotle, finding a scapegoat in a mythological nature, abandoned the problem as insoluble: to-day we are still seeking some outline of an analysis of human characters.

The chief interest of the Aristotelian Eugenics lies in the fact that he set out to construct a scheme which should be practicable for Athens, no academic speculation in the clouds, but a possible plan of social reform. "The legislator must bear two things in mind—what is possible and what is proper. It is not enough to perceive what is best without being able to put it in practice."[2] Hence careful attention is paid to popular opinion and existing custom. The *consensus mundi*, the collective capacity of the many, are factors the importance of which he constantly emphasizes. This "divine right of things as they are," involving a certain conservatism, led him to uphold any custom revealing after analysis a balance of good in its favour. Hence the acceptance of infanticide and slavery, and regulation of the marriage age. The doctrine of the mean also, which helped to decide the proper disposition of parents and to fix the number of the state, was an essential article of received opinion. If Athens had ever instituted a Eugenic system, it would have been the system of Aristotle, not of Sparta or Plato.

[1] Bateson, "Biological Fact and Structure of Society." p. 12.

[2] 1289*a*.

Aristotle, applying the idea of development to knowledge as well as to the objects of knowledge, not only conceived his own theories as a development of those of his predecessors, but imagined himself as standing at the culmination of Greek thought. This eschatology was justified. The Politics not only set the final seal upon political science in Greece, it marks also the last word in Eugenics.

Looking back upon these past systems, we find that the task was easier for a pre-Christian age which could sacrifice the lower classes in the interests of the higher and solve the problems of heredity by infanticide. Even when the influence of Sparta had died away and Eugenics was regarded no longer as a mere ancillary to war, parochialism confined it to a single state, inhumanity to a single class. The features which are so prominent in all these early schemes—precise limitation of the marriage age and detailed schemes of education—are features which, though still recognized, no longer have their place in the foreground of modern thought.

The Greeks were concerned more with the banks of the stream; the modern aim is to control its source. The gradual process of social reform during the first three quarters of the nineteenth century has gradually brought us farther back in the course of successive stages. From measures of sanitation and factory laws we have passed to national schemes of education. A gradual extension

of aim has led to efforts to guard the child at birth, even before birth; and, finally, Eugenics has set itself to solve the problems of heredity. The "Life-History Albums" of Galton would trace the workings of the ancestral curse, the *Ate* of inherited disease as well as of inherited sin: Mendelism would render possible a factorial analysis of the individual.

Nevertheless, though the Greeks abandoned the question of heredity in despair, and, unable to prevent its victims being born, slew them if possible at birth, they realized many of the problems which, 2,000 years later, are still confronting Eugenists, and they realized in part the remedies. It is wrong to say that antiquity never raised the question as to whether a hereditary disease or predisposition to disease should be a bar to marriage. The Spartans, Plato, Aristotle, all realized the problem, Plato returning to atavism for his remedy, Aristotle conceiving the humaner methods of Modern Eugenists. Sparta and Plato, too, were not blind to the need, to-day so urgent, of restrictive measures dealing with the insane, and Plato even dreamt of segregation. There is the recognition, also, that Eugenics is the sphere of the physician as well as of the philosopher; that quantity is a factor in the problem as well as quality; that selective Eugenics must regard the psychical as well as the physical. But even that final formulation in the pages of Aristotle, which would have been possible to the age, and more possible to-day than the narrow scheme of Sparta or the unsub-

stantial visions of Plato, even these saner Eugenics have in them much that is impossible, no little that is abhorrent, to thinkers of to-day. But the idea had been given life and brought to bear. Long after the sowers had passed away it sprang to renewed existence in a different age and in a different form, engendered by new conditions.

After Aristotle stretches a gulf of years in which Eugenics lies amid the lumber of forgotten theory. The state education of the fourth century may have owed something to Plato and Aristotle, but there is no state control of marriage. Zeno and Chrysippus, influenced, perhaps, by a perverted Platonism, advocated community of wives. But Zeno taught that the intelligent man should avoid all public affairs except in a state approaching perfection; and Chrysippus, writing a treatise on the education of childhood, is reproached by Poseidonius for neglecting its first and most important stages, especially those before birth. "Poseidonius blames Chrysippus and admires what Plato taught about the formation of children while yet unborn." [1]

No attempt was ever made to realize the ideals of the Republic "except by dreamers and somnambulists at second-hand in an age of mysticism and social degeneration." Plotinus obtained from the Emperor Gallienus and his wife the concession of a ruined city in Campania, which had once been founded by philosophers. He proposed to restore

[1] Galen., "Hipp. et Plat.," v. i., p. 465.

it, name it Platonopolis, and adopt the laws of Plato.[1] This early anticipation of the Oneida Community never seems to have been realized.

In the "Utopia" of Sir Thomas More the marriage preliminaries, suggesting something of Plato's physical point of view, recall a passage in the Laws. But in Campanella's "City of the Sun" we find a closer approximation to the Platonic Eugenics. Marriage, recognized as an affair of the state rather than of the individual, because the interests of future generations are involved, is only to be performed in the light of scientific knowledge. The "great master," who is a physician, aided by the chief matrons, is to supervise marriage, which will be confined to the valorous and high-spirited. There is to be a system of state education, and the women are trained for the most part like men in warlike and other exercises. Campanella has been called the prophet of Modern Eugenics: he is the connecting-link between the crude Eugenics of the past and the scientific Eugenics of Galton.

There is one brief attempt at practical Eugenics, the Oneida Community of Noyes, which, outrunning scientific knowledge and the ideas of the day, raised the bitter antagonism of a public not yet fitted to receive it. Two thousand years after Aristotle Galton formulated the first scientific scheme of Eugenics.

This sudden arrest of the developing Eugenic ideal after Aristotle is not difficult of explanation.

[1] Porphyry, "Plotinus," c. 12.

Realizing only vaguely the difficulties with which modern science has encompassed the problem, the Ancients might have been expected to have cherished the ideal till actual experiment revealed these incommensurable factors. With their conception of the state as an *être moral collectif*, with their recognition of law as the sum of the spiritual limits of the people, with the favourable support of the *consensus mundi*, which Aristotle never opposed, everything seemed opportune for its realization.

But just as a good man is crushed by a bad environment, so a social theory must wither in an unresponsive age. Eugenics is dependent upon the ethical perspective; the philosophy of egotism—*le culte de soi-même*—finds no appeal in a theory which looks beyond the pleasure of the individual to the interests of the future race.

From Socrates to Aristotle philosophy has striven to stem the current of political dissolution, and in philosophy we see an insurgent pessimism, an ever-growing prominence assigned to the theoretic life. The supremacy of Macedon signalized the final breakdown of Greek civilization. Aristotle, standing on the border-line, found in classic antiquity an influence sufficiently strong to place the community in the foreground as compared with the individual.

After Aristotle, the tendency which had already been at work among the philosophers of the Academy and the Peripatetics completely reversed the posi-

tion. Turning aside from the ideal of man as an organic member of society, philosophy concerned itself instead with the satisfaction of the ideas of the individual.

In place of their old dead principles men required new guides: they sought and found in two directions—in Orientalism and philosophy. From Orientalism they learnt to profess complete detachment from an ephemeral world of sordid corporeal change, to contemn women and offspring, to throw aside costume, cleanliness, and all the customary decencies of life: Karma will soon be exhausted, Nirvana attained. No theory of racial regeneration can flourish in such an atmosphere of inconsequent egotism.

Epicureanism, with its watchword of "seclusion," teaching its disciples to forego marriage and the rearing of children, can have had no place for Eugenics. Equally opposed is the tendency of Stoicism, which "draws such a sharp distinction between what is without and what is within that it regards the latter as alone essential, the former as altogether indifferent, which attaches no value to anything except virtuous intention, and places the highest value in being independent of everything."[1]

Such a system is not likely to concern itself with the interests of a state in which the mass of men are fools, and denied every healthy endeavour. It is true that besides this tendency toward individual independence there was a logical development of

[1] Zeller, "Stoics and Epicureans," p. 310.

Stoicism which recognized that man, to obtain his freedom, must live, not for himself, but for society.[1] But it was the earlier end that continued to predominate, bringing Stoicism nearer and nearer to the selfish egotism of Epicurus. It is only in a community of wise ones that a man will marry or beget children.[2] A generation imbued with such philosophies would have as little thought of racial improvement as an age which found its guidance in the teachings of Schopenhauer and Hartmann.

Moreover, cosmopolitanism, consequent on the dissolution of the city state, not only brought individualism in its train, but let loose the inveterate pessimism of the Ancients. So long as the city state existed, the Greeks, forgetful of the Golden Age in the past and the inevitable cataclysm in the future, concerned themselves with the future progress of a limited race. But pessimism, linked with individualism, became a living force in a despairing age, which had never developed the evolutionary conceptions of Anaximander. Men of after generations will be just as foolish and unthinking, and just as short-lived. Neither the future nor the past matters, but only the present.[3] Sooner or later all things will be transmuted again into the fiery substance from which they came. Individualism and belief in inevitable decadence were the two

[1] Cic., "Fin.," iii. 19, 64; Sen., "Ep.," 95, 52 ("membra sumus corporis magni").

[2] Epict., "Diss.," iii. 27, 67.

[3] "M. A. Disc.," 112.

influences which effectually thwarted the growth of Ancient Eugenics.

But this philosophy of Weltschmerz is an abandoned creed. *Le temps de tristesses dogmatiques est passé.* Organic evolution has changed our whole perspective. We see our wills as temporary manifestations of a greater Will: our sense of time and causation has opened out to the infinite, and we are learning to subordinate the individual lot to the specific destiny.

So Eugenics, ruthlessly practised in those distant ages, "when wild in wood the noble savage ran," rudely systematized, passed into the constitution of Sparta. The selfish creed of a warrior caste, even in the hands of Plato and Aristotle it never lost its parochialism, and when this narrow spirit gave way before the cosmopolitanism of subsequent philosophy, individualism, isolating human effort from a world rational only to the evolutionist, effectually checked the growth of the Eugenic ideal for centuries.

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